

Abstract of Disclosure

Disclosed is a toy having a speech recognition function and two-way conversation for a dialogue partner in which a speech recognition system is installed in the interior thereof to thereby have an interesting conversation (audible speech) with the dialogue partner (a user). The toy has a first memory for storing speech compression data made by compressing a plurality of digital speech signal streams in a toy body that has a predetermined receiving space and is of at least one of human body and animal shapes and a second memory in which an operation space is arranged for recognizing a dialogue partner's speech signal inputted from the outside, which includes: a speech input/output part for converting at least one sentence of the dialogue partner's speech signal stored in the second memory into an electrical speech signal to output the converted signal and for audibly transmitting the speech signal restored to the dialogue partner; a circular buffer in which the dialogue partner's digital speech signal outputted from the speech input/output part is temporarily stored; a speech recognizer for dividing the digital speech signal stored in the circular buffer into speech recognizing words in accordance with speech recognizing constant of the compression data stored in the first memory to

thereby recognize the dialogue partner's speech by Viterbi algorithm; a dialogue manager for selecting at least one response sentence from the first memory to match the content of the speech recognized in the speech recognizer with a predetermined scenario; a speech decoder for extending and restoring the speech compression data of the first memory selected from the dialogue manager; an analog/digital and digital/analog converter arranged between the speech decoder and the speech input/output part, for converting one side of analog and digital speech signals into the other side thereof; and a memory controller arranged between the second memory and the speech recognizer, for moving the data from the first memory to the second memory.

Drawings